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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,982	03/12/2001	Stefan Karl	1200.473	6932

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EXAMINER

FORD, JOHN K

ART UNIT

PAPER NUMBER

3743

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,982

Applicant(s)

Karl

Examiner

FORD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-15-02
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 8-14 is/are pending in the application.

4a) Of the above claim(s) 3 is/are withdrawn from consideration (pursuant to 12/20/01 election, paper #4)

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1, 2, 8-14 is/are rejected.

Note: Claims 4-7 have been canceled.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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Applicant's response has been carefully considered. Applicant has refused to supply the Examiner with translations of, applicant cited, DE '654 and FR '867. Both were considered to be "X" references, thus they could not be more pertinent. As well, Mr. Karl did not provide any sketches of other documents showing the prior art system discussed in the "Background of the Invention" section of the specification.

As to the first deficiency the Examiner complete disagrees with counsel's assessment that DE '654 or FR '867 can be meaningfully understood by simply looking at the Figures.

It is seen why a company with the resources of Valeo would have any difficulty obtaining translations of these two documents, particularly ^{by} given the fact that one of them is assigned to Valeo. Why Mr. Karl could not provide any sketches or other documentation of the prior art he discusses in the "Background of the Invention" section of the specification is not explained. Counsel's conclusion that "it is submitted that the original disclosure is sufficient" is not supported by any factual analysis. Only one who actually knew what the system was could draw such a conclusion and the specification quite clearly does not adequately or meaningfully disclose the prior art know₁ to Mr. Karl.

As to applicant's arguments for allowing claim 1, valves (181, 182) are disclosed by Enomoto and would be required in Enomoto/JA 10-76837 combined prior art to selectively operate the heating cycle or the air conditioning cycle. Claim 1, in contrast to applicant's remarks, claims ~~(only requires)~~ one valve not the four valves discussed in applicant's remarks.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 12, applicant has now added the recitation of an "air-conditioning loop" to the claims. There is no antecedent basis for this recitation in either claim and the Examiner is unsure what to make of it. Applicant has already recited a "heat pump branch" (amended claim 1, line 12) and an "air-conditioning branch" (amended claim 1, line 8). What the necessity is for an "air-conditioning loop" is completely unclear.

Claim 12 has been rewritten as an independent claim and it is now completely unclear which of the two evaporators and two condensers recited in the first paragraph of claim 12 are actually in the "modular casing."

Both of claims 1 and 12 continue to recite structure in terms of intended function. See MPEP 2114. Apparatus claims cover what the device is not what it does.

Prior art documents which correspond to the systems described in the "Background of the Invention" portion of the specification are required in response to the action. Many highly relevant patents "X" (35 USC 102(b) references) namely DE '654 and FR '867 have been provided without translation. The Examiner has not made rejections on these because he doesn't understand them. Please provide translations to facilitate examination. Most of the prior art discussed there have no document numbers associated with them, so it will be necessary to contact the inventor, Mr. Karl, to determine whether documents showing these prior art systems exist. In the absence

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of documents, carefully drawn sketches with enough detail to permit a meaningful comparison to what is claimed here will be sufficient.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 10-14⁸ are rejected under 35 U.S.C. 103(a) as being unpatentable over JA 10-76837 in view of Enomoto Figure 8, and the description thereof.

JA '837 shows a refrigerant system for beneficially increasing the heating effect of a liquid based heating system. It has no ability to cool the compartment in hot weather. The compressor 2 is known to be the most costly component of automotive refrigerant system.

Enomoto teaches in Figure 8 a refrigerant based heater circuit (182, 13, 37, 15) and a refrigerant based cooler circuit (181, 11, 12, 30, 36 and 24) connected in parallel across the output and inputs of the compressor 10.

To have added a refrigerant based cooler circuit (as described above) to JA '837 to give the capability of cooling in the summer as well as heating in the winter would have been obvious to one of ordinary skill in climates where air conditioning was needed to preserve occupant comfort. Appropriate valves (181, 182) on the discharge side of the compressor would be necessary to separately activate the heating and cooling systems. The modification is shown below.



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Claims 1, 2, and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JA '837/Enomoto as applied to claims 1, 2, and 10-14 above, and further in view of Whalen or Momose (JA '134).

Whalen teaches by passes 64 and 66 around a chiller 10 and heater 12 controlled by valves 58 and 56. Similarly Momose Fig. 1 shows a heat pump circuit (1, 2, 3 and 4) and external fluid bypasses in loops 6 and 9.

In both Whalen and Momose the bypass of the external fluid permits more accurate control of its temperature. To have added such coolant by passes around heat exchangers 6 and 3 of JP 10-76837/Enomoto to permit accurate control fluid (coolant) temperatures in the coolant loop (i.e. to prevent the engine coolant from getting too cold or too hot) would have been obvious to one of ordinary skill.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of Echigoya et al.

To have used a conventional suction line accumulator such as disclosed by Echigoya at 66 in the prior art to prevent the compressor from ingesting liquid refrigerant and then breaking would have been obvious to one of ordinary skill in the art.

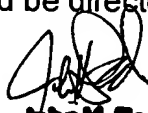
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to John Ford at telephone number 703-308-2636.


John K. Ford
Primary Examiner
John Ford
Primary Examiner
Art Unit 3743

J. Ford/els

September 26, 2002